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and

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## **(54) SPLINT FOR MANAGEMENT OF CONGENITAL HIP DISLOCATION**

The present invention refers to medicine, specifically to orthopedics.

There is a known splint for management of congenital hip dislocation, containing an extensible spreader with a groove and adjustable spring, mounting elements with thigh and shin cuffs, the spreader being attached to the mounting elements with a joint-hinge [1].

However, this type of splint does not allow for all types of active physiological movements in hip joints and knee joints and does not ensure active internal and external rotation of thighs with simultaneous centration of femoral heads in hip joint sockets.

The purpose of this invention is to ensure active internal and external rotation of thighs with simultaneous centration of femoral heads in the hip joint sockets and prevention of lateral looseness and stiffness of knee joints.

In order to achieve this, the mounting elements consist of rods connected via hinge-

joints, one of the rods has a groove and carries a tube with a pin placed in the groove; shin cuffs are attached to the tube, and the hinge-joint has a bracket, two shafts and a dentate half-clamp attached to a single rod.

Figure 1 shows the present splint for management of congenital hip dislocation, general view, partial section; figure 2 shows arrow A view from figure 1.

The present splint for management of congenital hip dislocation contains extensible spreader 1 with groove 2 and adjustable spring 3, mounting elements consisting of rods 4 and 5 connected via a hinge-joint. Rod 5 has groove 6 and carries tube 7 with pin 8 placed in groove 6. Spreader 1 is also attached to mounting elements via a hinge-joint consisting of bracket 9, two shafts 10 and 11 and a dentate half-clamp 12 attached to one rod 4. Mounting elements are attached to thigh and shin cuffs 13 and 14.

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This design of the splint allows for management of congenital hip dislocation with active internal and external rotation of thighs with simultaneous centration of femoral heads in the hip joint sockets and prevents lateral looseness and stiffness of knee joints.

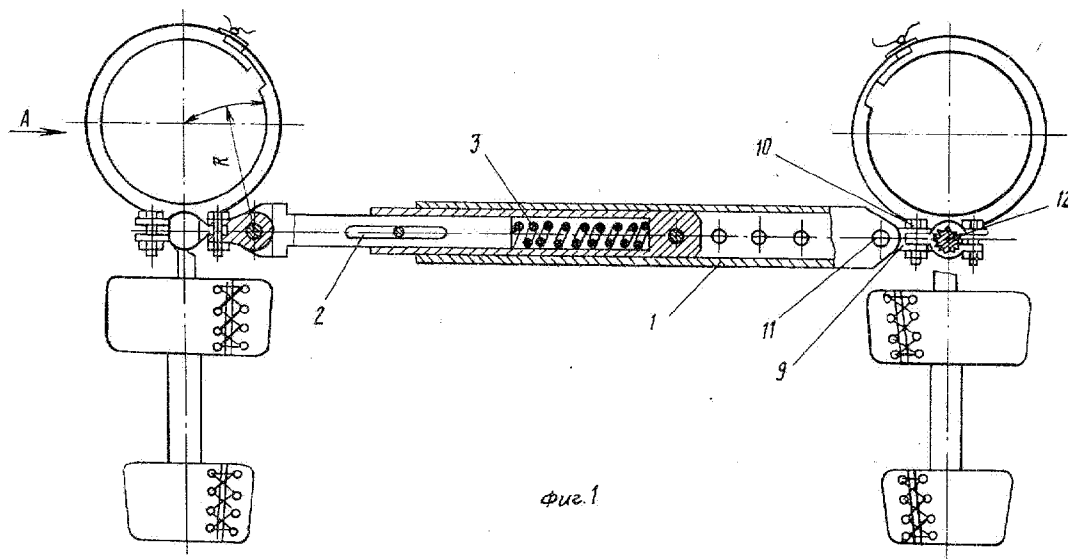
### Summary of Invention

Splint for management of congenital hip dislocation, containing an extensible spreader with groove and adjustable spring, mounting elements with thigh and shin cuffs, the spreader being attached to the mounting elements via a hinge joint, *distinguished* by ensuring active

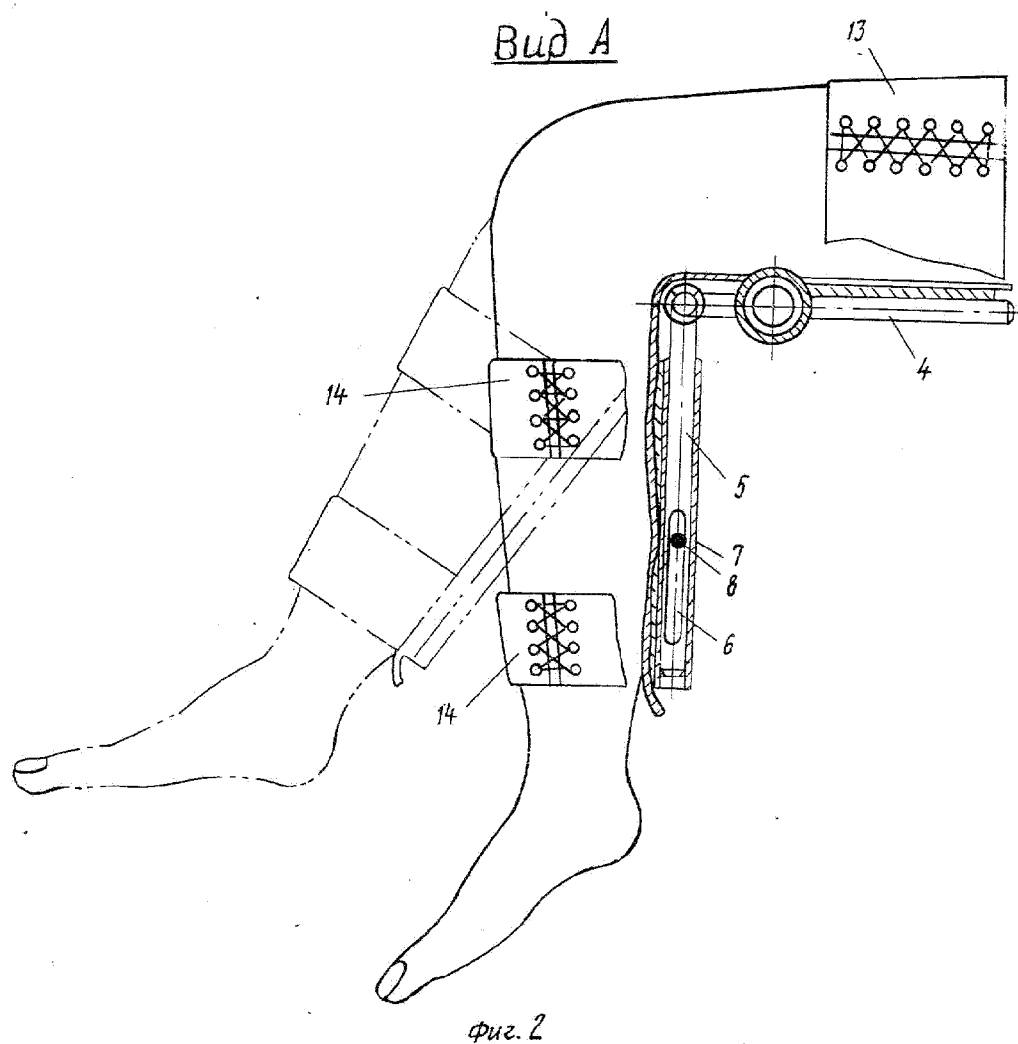
internal and external rotation of thighs with simultaneous centration of femoral heads in hip joint sockets and prevention of lateral looseness and stiffness of knee joints by mounting elements consisting of rods connected via hinge joints, one of the rods having a groove, carrying a tube with a pin placed in the groove; shin cuffs are attached to the tube, and the hinge-joint consists of a bracket, two shafts and a dentate half-clamp fixed on a single rod.

Sources of information considered for expert evaluation:

1. USSR Certificate of Authorship No.175617, cl. A 61 F 5/04, 1963.



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